



# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	10/617,620
Filing Date	July 11, 2003
First Named Inventor	Keith D. Trott
Art Unit	2821
Examiner Name	Not Yet Assigned
Attorney Docket Number	RTN-141PUS

Total Number of Pages in This Submission

141

## ENCLOSURES (Check all that apply)

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<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
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<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
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Remarks

In the event a petition for extension of time is required by this paper and not otherwise provided, such petition is hereby made and authorization is provided herewith to charge deposit account No. 50-0845 for the cost of such extension.

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual	Donald F. Mofford	Reg. No. 33,740
Signature	Daly, Crowley & Mofford, LLP	
Date	13 Nov 2003	

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: MS Group Art Unit #2821, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below

Typed or printed	Donald F. Mofford	
Signature	<i>Donald F. Mofford</i>	Date 13 Nov 2003

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: MS Group Art Unit #2821, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/617,620  
Applicant : Keith D. Trott et al.  
Filed : July 11, 2003  
T.C./A.U. : 2821  
Examiner : Not Yet Assigned

Confirmation No.: 2919

Docket No. : RTN-141PUS  
Customer No. : 022494

Certificate of Mailing (37 C.F.R. 1.8(a))

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13 Nov 2003  
Date of Signature  
and Mail Deposit

By: [Signature]  
Donald F. Mofford  
Reg. No. 33,740  
Attorney for Applicant(s)

**INFORMATION DISCLOSURE STATEMENT**

MS Group Art Unit #2821  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

It is desired to cite for the record in this application the enclosed documents listed on the attached copy of PTO form PTO/SB/08A (Formerly #1449). The paragraph(s) marked below are applicable to this Information Disclosure Statement.

[ X ] (1) The enclosed Information Disclosure Statement is being filed: within three months of the filing date; or within three months of the entry of the national stage of the above-identified application; or before the mailing of a first Office Action on the merits; or before the

mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. Accordingly, Applicant(s) believes that no fee or statement is required.

[ ] (2) Pursuant to 37 C.F.R. § 1.97(c), the enclosed Information Disclosure Statement is being filed before the mailing date of a final action or a notice of allowance and is accompanied by the fee set forth in 37 C.F.R. § 1.17(p).

SUBMISSION UNDER 37 C.F.R. § 1.97(c) INCLUDING A STATEMENT UNDER 37 C.F.R. § 1.97(e)(1)

[ ] (3) Pursuant to 37 C.F.R. § 1.97(c), the enclosed Information Disclosure Statement is being filed before the mailing date of a final action or a notice of allowance and is accompanied by a statement under 37 C.F.R. § 1.97(e)(1). The undersigned hereby states that each item of information contained in the attached Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application mailed not more than three months prior to the filing of the accompanying Information Disclosure Statement.

SUBMISSION UNDER 37 C.F.R. § 1.97(c) INCLUDING A STATEMENT UNDER 37 C.F.R. § 1.97(e)(2)

[ ] (4) Pursuant to 37 C.F.R. § 1.97(c), the enclosed Information Disclosure Statement is being filed before the mailing date of a final action or a notice of allowance and is accompanied by a statement under 37 C.F.R. § 1.97(e)(2). The undersigned hereby states that no item of information contained in the accompanying Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the accompanying Information Disclosure Statement was known to any individual having a duty of disclosure as set forth in 37 C.F.R. § 1.56 (c) more than three months prior to the filing of the accompanying Information Disclosure Statement.

SUBMISSION UNDER 37 C.F.R. § 1.97(d) INCLUDING A STATEMENT UNDER 37 C.F.R. § 1.97(e)(1)

[ ] (5) Pursuant to 37 C.F.R. § 1.97(d), the enclosed Information Disclosure Statement is being filed on or before payment of the issue fee and is accompanied by a statement under 37 C.F.R. § 1.97(e)(1) and the fee required under 37 C.F.R. § 1.17(p). The undersigned hereby states that each item of information contained in the accompanying Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Information Disclosure Statement.

SUBMISSION UNDER 37 C.F.R. § 1.97(d) INCLUDING A STATEMENT UNDER 37 C.F.R. § 1.97(e)(2)

[ ] (6) Pursuant to 37 C.F.R. § 1.97(d), the enclosed Information Disclosure Statement is being filed on or before payment of the issue fee and is accompanied by a statement under 37 C.F.R. § 1.97(e)(2) and the fee required under 37 C.F.R. § 1.17(p). The undersigned hereby states that no item of information contained in the accompanying Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the accompanying Information Disclosure Statement was known to any individual having a duty of disclosure as set forth in 37 C.F.R. § 1.56(e) more than three months prior to the filing of the accompanying Information Disclosure Statement.

The filing of this Information Disclosure Statement is not a representation by the undersigned as to personal knowledge of the contents of every word or phrase of the material enclosed or that reliance on other suitably trained professionals has not been made.


If a search report of a searching agency is enclosed identifying the nature of the relevance of each document, such a designation is deemed to satisfy Rule 98(a) (3) even if in a foreign language, since the few terms of relevance therein are deemed of universal cognizance. However, Applicant(s) does not necessarily adopt the position reflected by that report.

The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845.

Respectfully submitted,

Dated: 13 Nov 2003

DALY, CROWLEY & MOFFORD, LLP

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PTO/SB/08A (02-03)

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Patent Application Form 1449/PTO

**Complete if Known**

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 2

Application Number	10/617,620
Filing Date	July 11, 2003
First Named Inventor	Keith D. Trott
Art Unit	2821
Examiner Name	Not Yet Assigned
Attorney Docket Number	RTN-141PUS

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	US-	4,793,925	11/27/1990	Nussair et al.	
	US-	5,208,602	05/04/1993	Monser et al.	
	US-	5,248,987	09/28/1993	Lee	
	US-	5,428,364	06/27/1995	Lee et al.	
	US-	5,519,408	05/21/1996	Schnetzer	
	US-	5,557,291	09/17/1996	Chu et al.	
	US-	5,977,911	11/02/1999	Green et al.	
	US-	6,292,153	09/18/2001	Aiello et al.	
	US-	6,271,799	08/07/2001	Rief et al.	
	US-	6,552,691	04/22/2003	Mohuchy et al.	
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FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup> "Number" "Kind Code" (if known)			

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw the through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbol as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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PTO/SB/08B (02-03)

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Instructions for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 2

Complete if Known

Application Number	10/617,620
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First Named Inventor	Keith D. Trott
Art Unit	2821
Examiner Name	Not Yet Assigned
Attorney Docket Number	RTN-141PUS

OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		DANIEL H. SCHAUBERT, TAN-HUAT CHIO, Wideband Vivaldi Arrays for Large Aperture Antennas, 1999, PP 59-57, Perspectives on Radio Astronomy - Technologies for Large Antenna Arrays, Netherlands Foundation for Research in Astronomy - 1999.	
		KEITH TROTT, BOB CUMMINGS, RONNI CAVENER, MARK DELUCA, JOE BIONDI, AND TOM SIKINA, Wideband Phased Array Radiator, pp. 1-4, 2003 IEEE Phased Array Conference Proceedings, held in Boston, MA, October 14-17, 2003.	

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Group Art Unit #2821, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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